

RE 447.998FAT 9/26/2006

- 2 -

In the claims:

Please amend the claims as shown below:

- 5 1. (Currently amended) A method used in a computer,
comprising:
providing a logical theory having clauses;
providing a rule that ~~that~~ has been derived from the clauses
in the logical theory, and for which ~~the~~ derivation of the
10 rule is provided in ~~the~~ form of a partial proof tree having
nodes;
providing a set of examples;
providing derivations of the examples from the clauses in
the logical theory in a form of proof trees;
15 transforming each proof tree into a database of a coverage
check apparatus using a first process sequence;
transforming the partial proof tree into a database query of
the coverage check apparatus using a second process sequence;
and
20 executing the query to identify tuples in the database that
correspond to the nodes of ~~a~~ the partial proof tree.
2. (Previously amended) The method according to claim 1
wherein the method further comprises determining whether the
25 partial proof tree is identical to a portion of the proof
tree.
3. (Previously amended) The method according to claim 1
wherein the method further comprises investigating for each
30 rule and each example whether the rule covers the example.
4. (Previously amended) The method according to claim 3
wherein the method further comprises investigating whether a
condition part of the rule is satisfied by the example.

RF 447.998PAT 9/26/2006

- 3 -

5. (Previously amended) The method according to claim 1 wherein the method further comprises making the partial proof tree more limiting than the logical theory.

5

6. (Currently amended) The method according to claim 1 wherein the method further comprises concluding that the rule does not cover the example when tuples that correspond to the nodes of the partial proof tree cannot be identified in the database
10 ~~no match is found in database tables.~~

7. (Currently amended) The method according to claim 6 wherein the method further comprises concluding that the rule does cover the example when tuples that correspond to the
15 nodes of the partial proof tree can be identified in the database ~~a match is found in database tables.~~

8. (Currently amended) The method according to claim 1 wherein the method further comprises determining whether the tuples
20 identified found in the database are associated with a single ~~the same~~ example.

9. (Previously amended) The method according to claim 1 wherein the method further comprises using the logical theory
25 to describe all possible rules that may be created.

10. (Currently amended) The method according to claim 1 wherein the method further comprises ~~the query checker~~
~~checking determining~~ whether or not the query gives an empty
30 result.